

Abstract

An Orthogonal Frequency Division Multiplexing (OFDM) receiving apparatus having a sub-carrier selectively combining mode and an antenna selecting mode. The sub-carrier selectively combining mode is configured to selectively combine signals for each sub-carrier. The antenna selecting mode is configured to select a receiving antenna. The OFDM receiving apparatus operates in a proper operation mode based on a communication environment. As a result, in a poor communication environment, signals are selectively combined for each sub-carrier. However, in a relatively satisfactory communication environment, unnecessarily operation of an RF and IF circuit, an A/D converter, and a DDT connected to each receiving antenna may be avoided.